

First Quarter 2017 Groundwater Monitoring Summary Report

Eaton Commons Release Weld County, Colorado Remediation #9251

Prepared for:



370 17th St., Suite 2500
Denver, CO 80202

Prepared by:



6899 Pecos Street, Unit C
Denver, Colorado 80221

April 17, 2017

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1. Introduction

This report summarizes the groundwater monitoring and remediation activities conducted during the first quarter 2017 at the Eaton Commons project (Site) in Weld County, Colorado (Figure 1). Tasman Geosciences (Tasman) performed these activities on behalf of DCP Midstream, LP (DCP). The field activities were conducted with the purpose of monitoring groundwater flow and quality conditions in the Site subsurface and performing groundwater remediation. Current Site conditions were evaluated from field data and analytical laboratory results collected during the reporting period on March 15, 2017.

2. Site Location and Background

The Site is located in the northeastern quarter of the southeastern quarter of Section 31, Township 7 North, Range 65 West (approximate coordinates 40.528161 degrees north and -104.696969 degrees west). It is approximately 0.28 miles north of the intersection of US Highway 74 and County Road 39 within the Eaton Commons Neighborhood. Specifically, the Site is located partially within two backyards of private residences located at 301 Hickory Street and 940 East Third St in the southeast corner of the Eaton Commons neighborhood.

On May 4, 2015, a petroleum hydrocarbon release from a buried DCP sales line was discovered. An initial Form 19 was submitted to the Colorado Oil and Gas Conservation Commission (COGCC) on May 6, 2015 and a supplemental Form 19 was submitted on June 2, 2015. Excavation activities were conducted to remove surface and subsurface soil impacts and approximately 1,140 cubic yards of impacted soil was removed and disposed of at the Waste Management Facility in Ault, CO.

Additionally, during excavation activities, groundwater was encountered at approximately 8-feet below ground surface (bgs) and approximately 375 barrels of groundwater was removed from the excavation with a vacuum truck prior to backfilling.

A Form 27 (document number 200437203) was submitted to the COGCC on August 20, 2015 and the COGCC issued remediation #9251 for the Site. Groundwater monitoring and remediation activities are being conducted in accordance with the approved work plan provided in the Form 27.

3. Groundwater Monitoring

This section describes the field and laboratory activities performed during the first quarter 2017 groundwater monitoring event. Quarterly monitoring activities were conducted on March 15, 2017, and included Site-wide groundwater gauging and sampling. Figure 2 illustrates the groundwater monitoring network utilized to perform these activities at the Site.

3.1 Groundwater Elevation Monitoring

Groundwater levels were measured to evaluate hydraulic characteristics and provide information regarding seasonal fluctuations in groundwater elevations at the Site. During the first quarter 2017, groundwater levels were measured at eight (8) monitoring well locations and one remediation well location (REM Well).

Groundwater levels were measured on the north side of the well casing to the nearest 0.01-foot using an oil-water interface probe (IP). Groundwater level data were later converted to elevation (feet above mean sea level [AMSL]). Measured groundwater levels and the calculated groundwater elevations are presented in Table 1.

A first quarter 2017 groundwater elevation contour map, included as Figure 3, indicates that groundwater flow at the Site generally trends to the northwest. The range of groundwater elevations and the calculated average hydraulic gradient (using elevations from BH01 and BH07R) at the Site are summarized in the table below.

Summary of Measured Hydraulic Parameters/

	First Quarter 2017 (3/15/2017)
Maximum Elevation (Well ID)	4,820.16 (BH01)
Minimum Elevation (Well ID)	4,817.25 (BH07R)
Average Change from Previous Monitoring Event – All Wells	-0.37 feet
Average Hydraulic Gradient (ft/ft) / (Well IDs)	0.017 (BH01 to BH07R)

3.2 Groundwater Quality Monitoring

Subsequent to recording groundwater level measurements at each monitoring well, groundwater samples were collected from five (5) of the Site monitoring wells using disposable polyethylene bailers. Monitoring wells BH03 and BH04 as well as one remediation well location (REM Well) were dry during the fourth quarter 2016 monitoring event. Additionally, monitoring well BH05 did not contain a sufficient volume of water to collect a sample for laboratory analysis.

A minimum of three well casing volumes of groundwater were purged from each monitoring well prior to collecting groundwater samples. Groundwater samples were placed in clean laboratory supplied containers for the selected analytical methods, packed in an ice-filled cooler and maintained at approximately four degrees Celsius (°C) for transportation to the laboratory. Groundwater samples were then delivered under chain-of-custody procedures to Summit Scientific Laboratories (Summit) in Golden, CO for analysis.

Water quality samples were submitted for analysis of benzene, toluene, ethylbenzene, and xylene (BTEX) by United States Environmental Protection Agency (USEPA) Method 8260B.

Table 2 summarizes BTEX concentrations in groundwater samples collected during the reporting period. Analytical results up to and including the first quarter 2017 event are included in Appendix A and the laboratory analytical report for the first quarter 2017 is included in Appendix B. Analytical results are also displayed on Figure 4.

BTEX concentrations at all 5 of the sampled monitoring well locations were below laboratory detection limits and the COGCC applicable standards during the first quarter 2017.

4. Remediation Activities

This Section includes a description of the active remediation activities at the Site along with observations during remediation efforts.

4.1 Groundwater Remediation Activities

Vacuum enhanced fluid recovery (EFR) groundwater remediation events were conducted at the Site during the first quarter 2017 at the EFR well locations and the horizontal remediation wells illustrated on Figure 2. Between December 29, 2016 and March 27, 2017, eleven (11) EFR remediation events were conducted for a project total of 67 EFR events. During the first quarter 2017 EFR events, vacuum was applied continuously to the EFR, AS, and horizontal remediation wells illustrated on Figure 2 during each event for a minimum 6-hour period. A total of approximately 39 barrels (bbls) of groundwater was recovered during the first quarter 2017 through EFR remediation activities and was disposed of at the NGL Water Solutions DJ, LLC, C-3 disposal well in LaSalle, CO. A project total of approximately 680 bbls of groundwater has been removed since EFR remediation activities were initiated at the Site.

5. Conclusions

Evaluation of the first quarter 2017 monitoring data provides the following general observations:

- During the first quarter 2017, groundwater flow at the Site was towards the northwest which is consistent with previous quarterly monitoring data.
- Groundwater elevations across the Site dropped slightly compared to the decrease noted between third and fourth quarter 2016. The decrease in groundwater elevation may be attributed to seasonal variations and/or outside factors related to adjacent agricultural activities.
- BTEX concentrations at the five (5) sampled monitoring well locations were below laboratory detection limits and the COGCC applicable standards. However, the wells that have historically had BTEX concentrations above COGCC standards (BH03 and REM Well) were again observed to be dry during the first quarter 2017 monitoring event. Therefore, samples for groundwater characteristics could not be collected from those locations.
- EFR remediation has been successful at removing impacted groundwater from the source area.

6. Recommendations

Based on evaluation of data and Site activities from the first quarter 2017, recommendations for the Site include:

- Continue quarterly groundwater monitoring and sampling at the monitoring well locations illustrated on Figure 2.

- Continue weekly EFR activities at the EFR, AS, and horizontal remediation wells illustrated on Figure 2.
- Initiate supplemental excavation, remediation, and well installation efforts as described in the approved Form 27.
- Submit a Remediation Implementation Report summarizing the additional remediation and investigation efforts within 60 days of completion of those efforts.

Tables

TABLE 1
FIRST QUARTER 2017
SUMMARY OF GROUNDWATER ELEVATION DATA
DCP MIDSTREAM - EATON COMMONS RELEASE
WELD COUNTY, COLORADO

Location	Date	Depth to Groundwater (feet)	Total Depth (feet)	TOC Elevation (feet amsl)	Groundwater Elevation (feet amsl)	Change in Groundwater Elevation Since Previous Event (1) (feet)
BH01	6/6/2016	7.00	10.16	4829.11	4822.11	-0.29
BH01	8/25/2016	3.74	10.20	4829.11	4825.37	3.26
BH01	12/12/2016	8.30	10.20	4829.11	4820.81	-4.56
BH01	3/15/2017	8.95	10.20	4829.11	4820.16	-0.65
BH02	6/6/2016	7.91	10.51	4829.98	4822.07	-0.02
BH02	8/25/2016	5.29	10.54	4829.98	4824.69	2.62
BH02	12/12/2016	9.25	10.54	4829.98	4820.73	-3.96
BH02	3/15/2017	9.88	10.54	4829.98	4820.10	-0.63
BH03	6/6/2016	10.36	11.40	4830.93	4820.57	0.05
BH03	8/25/2016	8.21	11.13	4830.93	4822.72	2.15
BH03	12/12/2016	DRY	11.13	4830.93	NA	NA
BH03	3/15/2017	DRY	11.13	4830.93	NA	NA
BH04	6/6/2016	9.92	11.20	4830.80	4820.88	-0.22
BH04	8/25/2016	6.91	11.23	4830.80	4823.89	3.01
BH04	12/12/2016	DRY	11.25	4830.80	NA	NA
BH04	3/15/2017	DRY	11.25	4830.80	NA	NA
BH05	6/6/2016	8.63	10.66	4829.76	4821.13	-0.58
BH05	8/25/2016	4.84	10.70	4829.76	4824.92	3.79
BH05	12/12/2016	9.93	10.70	4829.76	4819.83	-5.09
BH05	3/15/2017	10.37	10.70	4829.76	4819.39	-0.44
BH06	6/6/2016	11.41	14.61	4831.81	4820.40	0.02
BH06	8/25/2016	9.49	14.65	4831.81	4822.32	1.92
BH06	12/12/2016	12.51	14.65	4831.81	4819.30	-3.02
BH06	3/15/2017	12.87	14.65	4831.81	4818.94	-0.36
BH07R	6/6/2016	11.44	22.36	4830.24	4818.80	1.18
BH07R	8/25/2016	12.24	22.22	4830.24	4818.00	-0.80
BH07R	12/12/2016	12.95	22.22	4830.24	4817.29	-0.71
BH07R	3/15/2017	12.99	22.22	4830.24	4817.25	-0.04
BH08	6/6/2016	12.57	24.33	4830.39	4817.82	-0.29
BH08	8/25/2016	11.93	24.20	4830.39	4818.46	0.64
BH08	12/12/2016	12.81	24.20	4830.39	4817.58	-0.88
BH08	3/15/2017	12.90	24.20	4830.39	4817.49	-0.09
REM Well	8/25/2016	3.72	7.61	NM	NM	NA
REM Well	12/12/2016	DRY	7.61	NM	NM	NA
REM Well	3/15/2017	DRY	7.61	NM	NM	NA
Average groundwater elevation change between 12/12/2016 and 3/15/2017						-0.37

Notes:

1- Changes in groundwater elevation calculated by subtracting the measurement collected during the previous monitoring event from the measurement collected during the most recent monitoring event.

amsl = feet above mean sea level

TOC = top of casing

Groundwater elevation = (TOC Elevation - Measured Depth to Water)

NA = Not Applicable

NM = Not Measured

TABLE 2
FIRST QUARTER 2017
SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER
DCP MIDSTREAM - EATON COMMONS RELEASE
WELD COUNTY, COLORADO

Location Identification	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Comments
COGCC Standards (µg/L)⁽¹⁾		5	560	700	1,400	
BH01	3/15/2017	<1.0	<1.0	<1.0	<1.0	
BH02	3/15/2017	<1.0	<1.0	<1.0	<1.0	
BH03	3/15/2017	Not Sampled				DRY
BH04	3/15/2017	Not Sampled				DRY
BH05	3/15/2017	Not Sampled				Insufficient water volume for sample collection.
BH06	3/15/2017	<1.0	<1.0	<1.0	<1.0	
BH07R	3/15/2017	<1.0	<1.0	<1.0	<1.0	
BH08	3/15/2017	<1.0	<1.0	<1.0	<1.0	
REM Well	3/15/2017	Not Sampled				DRY

Notes:
 1). The environmental cleanup standards for groundwater that are applicable to this site are the Colorado Oil and Gas Conservation Commission (COGCC) standards for contaminants in groundwater according to Table 910-1 of the COGCC 900 Series Rule for E&P Waste Management.

Bold red values indicate an exceedance of the COGCC groundwater standards for the Site.

µg/L = micrograms per liter.

Figures

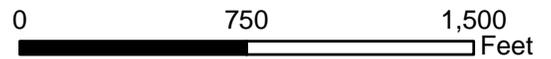
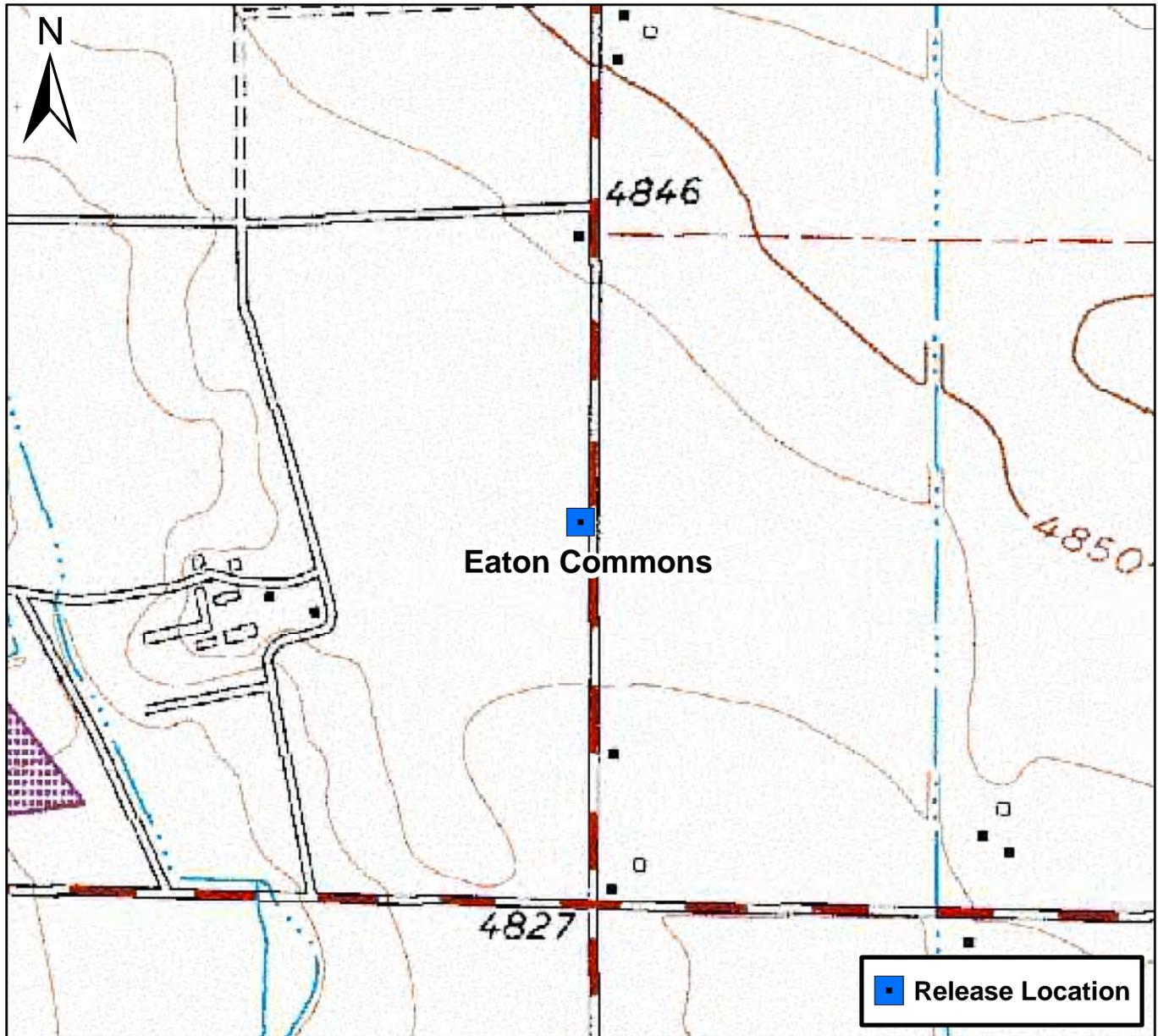


Figure 1

Site Location Map
 Eaton Commons
 NESE S31 T7N R65W
 Weld County, Colorado





DATE:
January 2017

DESIGNED BY:
B. Humphrey

DRAWN BY:
D. Arnold

TASMAN GEOSCIENCES
 Tasman Geosciences, Inc
 6899 Pecos Street - Unit C
 Denver, CO 80221

**DCP Midstream
 Eaton Commons**
 NESE Section 31, Township 7 North, Range 65 West
 Weld County, Colorado

Site Overview
 Map with Well Locations

Figure
 2



DATE: April 2017
 DESIGNED BY: B. Humphrey
 DRAWN BY: D. Arnold



**DCP Midstream
 Eaton Commons**
 NESE Section 31, Township 7 North, Range 65 West
 Weld County, Colorado

Groundwater Elevation
 Contour Map
 (March 15, 2017)

Figure
 3



BH08	
Compound	03/15/2017 (µg/L)
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<1.0

BH07R	
Compound	03/15/2017 (µg/L)
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<1.0

BH03	
Compound	03/15/2017 (µg/L)
Benzene	NS - DRY
Toluene	
Ethylbenzene	
Total Xylenes	

BH02	
Compound	03/15/2017 (µg/L)
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<1.0

REM W	
Compound	03/15/2017 (µg/L)
Benzene	NS - DRY
Toluene	
Ethylbenzene	
Total Xylenes	

BH05	
Compound	03/15/2017 (µg/L)
Benzene	NS - DRY
Toluene	
Ethylbenzene	
Total Xylenes	

BH04	
Compound	03/15/2017 (µg/L)
Benzene	NS - DRY
Toluene	
Ethylbenzene	
Total Xylenes	

BH06	
Compound	03/15/2017 (µg/L)
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<1.0

BH01	
Compound	03/15/2017 (µg/L)
Benzene	<1.0
Toluene	<1.0
Ethylbenzene	<1.0
Total Xylenes	<1.0

DATE: April 2017
 DESIGNED BY: B. Humphrey
 DRAWN BY: D. Arnold



**DCP Midstream
 Eaton Commons**
 NESE Section 31, Township 7 North, Range 65 West
 Weld County, Colorado

Groundwater Analytical
 Results Map
 (March 15, 2017)

Figure
 4

Appendix A
Historic Analytical Results

**APPENDIX A
HISTORICAL ANALYTICAL DATA
DCP MIDSTREAM - EATON COMMONS RELEASE
WELD COUNTY, COLORADO**

Location Identification	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Comments
COGCC Standards (µg/L)⁽¹⁾		5	560	700	1,400	
BH01	6/11/2015	<1.0	<1.0	<1.0	<1.0	
BH01	10/7/2015	<1.0	<1.0	<1.0	<1.0	
BH01	2/19/2016	<1.0	<1.0	<1.0	<1.0	
BH01	6/6/2016	<1.0	<1.0	<1.0	<1.0	
BH01	8/25/2016	<1.0	<1.0	<1.0	<1.0	
BH01	12/12/2016	<1.0	<1.0	<1.0	<1.0	
BH01	3/15/2017	<1.0	<1.0	<1.0	<1.0	
BH02	6/11/2015	<1.0	4.3	2.7	14	
BH02	10/7/2015	<1.0	<1.0	<1.0	<1.0	
BH02	2/19/2016	<1.0	<1.0	<1.0	<1.0	
BH02	6/6/2016	<1.0	<1.0	<1.0	<1.0	
BH02	8/25/2016	<1.0	<1.0	<1.0	<1.0	
BH02	12/12/2016	<1.0	<1.0	<1.0	<1.0	
BH02	3/15/2017	<1.0	<1.0	<1.0	<1.0	
BH03	6/11/2015	2,600	1.2	14	70	
BH03	10/7/2015	4,600	1.8	81	14	
BH03	2/19/2016	220	<1.0	26	20	
BH03	6/6/2016	<1.0	<1.0	<1.0	<1.0	
BH03	8/25/2016	1,100	<1.0	<1.0	10	
BH03	12/12/2016	Not Sampled				DRY
BH03	3/15/2017	Not Sampled				DRY
BH04	6/11/2015	<1.0	<1.0	<1.0	<1.0	
BH04	10/7/2015	<1.0	<1.0	<1.0	<1.0	
BH04	2/19/2016	<1.0	<1.0	<1.0	<1.0	
BH04	6/6/2016	<1.0	<1.0	<1.0	<1.0	
BH04	8/25/2016	<1.0	<1.0	<1.0	<1.0	
BH04	12/12/2016	Not Sampled				DRY
BH04	3/15/2017	Not Sampled				DRY
BH05	6/11/2015	<1.0	<1.0	<1.0	<1.0	
BH05	10/7/2015	76	7.2	<1.0	5.2	
BH05	2/19/2016	<1.0	<1.0	<1.0	<1.0	
BH05	6/6/2016	4.3	<1.0	<1.0	<1.0	
BH05	8/25/2016	<1.0	<1.0	<1.0	<1.0	
BH05	12/12/2016	<1.0	<1.0	<1.0	<1.0	
BH05	3/15/2017	Not Sampled				Insufficient water volume for sample collection.
BH06	10/7/2015	<1.0	<1.0	2.4	<1.0	
BH06	2/19/2016	<1.0	<1.0	<1.0	<1.0	
BH06	6/6/2016	<1.0	<1.0	<1.0	<1.0	
BH06	8/25/2016	<1.0	<1.0	<1.0	<1.0	
BH06	12/12/2016	<1.0	<1.0	<1.0	<1.0	
BH06	3/15/2017	<1.0	<1.0	<1.0	<1.0	

**APPENDIX A
HISTORICAL ANALYTICAL DATA
DCP MIDSTREAM - EATON COMMONS RELEASE
WELD COUNTY, COLORADO**

Location Identification	Sample Date	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	Comments
COGCC Standards (µg/L)⁽¹⁾		5	560	700	1,400	
BH07R	10/22/2015	<1.0	<1.0	<1.0	<1.0	
BH07R	2/26/2016	<1.0	<1.0	<1.0	<1.0	
BH07R	6/6/2016	<1.0	<1.0	<1.0	<1.0	
BH07R	8/25/2016	<1.0	<1.0	<1.0	<1.0	
BH07R	12/12/2016	<1.0	<1.0	<1.0	<1.0	
BH07R	3/15/2017	<1.0	<1.0	<1.0	<1.0	
BH08	10/22/2015	<1.0	<1.0	<1.0	<1.0	
BH08	2/19/2016	<1.0	<1.0	<1.0	<1.0	
BH08	6/6/2016	<1.0	<1.0	<1.0	<1.0	
BH08	8/25/2016	<1.0	<1.0	<1.0	<1.0	
BH08	12/12/2016	<1.0	<1.0	<1.0	<1.0	
BH08	3/15/2017	<1.0	<1.0	<1.0	<1.0	
REM Well	6/6/2016	<1.0	<1.0	<1.0	<1.0	
REM Well	8/25/2016	1,400	<1.0	<1.0	<1.0	
REM Well	12/12/2016	Not Sampled				DRY
REM Well	3/15/2017	Not Sampled				DRY

Notes:

1). The environmental cleanup standards for groundwater that are applicable to this site are the Colorado Oil and Gas Conservation Commission (COGCC) standards for contaminants in groundwater according to Table 910-1 of the COGCC 900 Series Rule for E&P Waste Management.

Bold red values indicate an exceedance of the COGCC groundwater standards for the Site.

NS = Not sampled.

µg/L = micrograms per liter.

Appendix B

Groundwater Laboratory Analytical Report

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

March 22, 2017

Steve Weathers
DCP Operating Company
370 17th Street #2500
Denver, CO 80202
RE: Eaton Commons

Enclosed are the results of analyses for samples received by Summit Scientific on 03/15/17 17:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Paul Shrewsbury', with a stylized, cursive script.

Paul Shrewsbury
President



DCP Operating Company
370 17th Street #2500
Denver CO, 80202

Project: Eaton Commons

Project Number: [none]
Project Manager: Steve Weathers

Reported:
03/22/17 13:57

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01	1703124-01	Water	03/15/17 12:10	03/15/17 17:30
BH02	1703124-02	Water	03/15/17 11:44	03/15/17 17:30
BH06	1703124-03	Water	03/15/17 11:50	03/15/17 17:30
BH07R	1703124-04	Water	03/15/17 12:00	03/15/17 17:30
BH08	1703124-05	Water	03/15/17 12:05	03/15/17 17:30

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



DCP Operating Company
370 17th Street #2500
Denver CO, 80202

Project: Eaton Commons

Project Number: [none]
Project Manager: Steve Weathers

Reported:
03/22/17 13:57

Summit Scientific

1703124

741 Corporate Circle Suite 1 • Golden, Colorado 80401
303-277-9310 • 303-374-5933 Fax

Page 1 of 1

Client: DCP / Tasman Geosciences
Address: 6899 Pecos St, Unit C
City/State/Zip: Denver, CO 80221
Phone: _____ Fax: _____
Sampler Name: Mitch Weller, Max Carza

Project Manager: Steve Weathers
E-Mail: swweathers@dcpmidstream.com ; bhumphrey@tasman-geo.cc
Project Name: Eaton Commons
Project Number: _____

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix			Analyze For:				Special Instructions	
				HCl	HNO ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	BTEX				
BH 01	3-15-17	1210	3			X		X					X			
BH 02	↓	1144	1													
BH 06	↓	1150	3													
BH 07R	↓	1200	3													
BH 08	↓	1205	3													
Relinquished by: <u>Mitch Weller</u>		Date/Time: <u>3-15-17 1730</u>		Received by: <u>MA</u>		Date/Time: <u>3/15/17 1730</u>		Turn Around Time (Check)				Notes:				
								Same Day <input type="checkbox"/> 72 Hours <input type="checkbox"/> 24 Hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 Hours <input type="checkbox"/>				on ice				
Relinquished by: <u>MA</u>		Date/Time: <u>3/15/17 1800</u>		Received in Lab by:		Date/Time:		Sample Integrity:								
								Temperature Upon Receipt: <u>5.5°C</u> Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>								

www.s2scientific.com

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



DCP Operating Company
370 17th Street #2500
Denver CO, 80202

Project: Eaton Commons

Project Number: [none]
Project Manager: Steve Weathers

Reported:
03/22/17 13:57

Sample Receipt Checklist

S2 Work Order: 1703124
 Client: DPI/Tasman Client Project ID: Eaton Commons
 Shipped Via: P/U (UPS, FedEx, Hand Delivered, Pick-up, etc.) Airbill #: _____
 Matrix (check all that apply): Air Soil/Solid Water Other: _____ (Describe)

Cooler ID					
Temp (°C)	<u>5.5</u>				

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature just above 0°C to ≤ 6°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
NOTE: If samples are delivered the same day of sampling, this requirement is waived provided that there is evidence that cooling has begun.				
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
If custody seals are present, are they intact ⁽¹⁾ ?			<input checked="" type="checkbox"/>	
Are short holding time analytes or samples with HTs due within 48 hours present?			<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.		<input checked="" type="checkbox"/>		
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ?		<input checked="" type="checkbox"/>		<u>HNO₃</u>
Note the type of preservative in the Comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , ect				
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ?			<input checked="" type="checkbox"/>	
Record the pH in Comments.				
If dissolved metals are requested, were samples field filtered?			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.

Nakita
Custodian Printed Name

[Signature]
Signature or Initials of Custodian

3/15/17 (P/U)
Date/Time



DCP Operating Company
 370 17th Street #2500
 Denver CO, 80202

Project: Eaton Commons
 Project Number: [none]
 Project Manager: Steve Weathers

Reported:
 03/22/17 13:57

BH01
1703124-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/15/17 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1703164	03/18/17	03/18/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **03/15/17 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		97.6 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		100 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	45-146		"	"	"	"	

Summit Scientific

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DCP Operating Company
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 Denver CO, 80202

Project: Eaton Commons
 Project Number: [none]
 Project Manager: Steve Weathers

Reported:
 03/22/17 13:57

BH02
1703124-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/15/17 11:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1703164	03/18/17	03/18/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **03/15/17 11:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		91.1 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		101 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.5 %	45-146		"	"	"	"	

Summit Scientific

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Project: Eaton Commons
 Project Number: [none]
 Project Manager: Steve Weathers

Reported:
 03/22/17 13:57

BH06
1703124-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/15/17 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1703164	03/18/17	03/18/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **03/15/17 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		100 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		100 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	45-146		"	"	"	"	

Summit Scientific

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Project: Eaton Commons
 Project Number: [none]
 Project Manager: Steve Weathers

Reported:
 03/22/17 13:57

BH07R
1703124-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/15/17 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1703164	03/18/17	03/18/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **03/15/17 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		101 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		103 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	45-146		"	"	"	"	

Summit Scientific

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Project: Eaton Commons
 Project Number: [none]
 Project Manager: Steve Weathers

Reported:
 03/22/17 13:57

BH08
1703124-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **03/15/17 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1703164	03/18/17	03/18/17	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: **03/15/17 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		99.1 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		102 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	45-146		"	"	"	"	

Summit Scientific

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Project: Eaton Commons
Project Number: [none]
Project Manager: Steve Weathers

Reported:
03/22/17 13:57

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

Batch 1703164 - EPA 5030 Water MS

Blank (1703164-BLK1)

Prepared & Analyzed: 03/18/17

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	12.7		"	13.3		95.0	37-154			
Surrogate: Toluene-d8	13.4		"	13.3		100	45-149			
Surrogate: 4-Bromofluorobenzene	13.8		"	13.3		104	45-146			

LCS (1703164-BS1)

Prepared & Analyzed: 03/18/17

Benzene	27.5	1.0	ug/l	33.3		82.4	51-132			
Toluene	33.0	1.0	"	33.3		98.9	51-138			
Ethylbenzene	37.1	1.0	"	33.1		112	58-146			
m,p-Xylene	79.9	2.0	"	66.5		120	57-144			
o-Xylene	36.0	1.0	"	32.7		110	53-146			
Surrogate: 1,2-Dichloroethane-d4	13.4		"	13.3		101	37-154			
Surrogate: Toluene-d8	13.3		"	13.3		100	45-149			
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3		100	45-146			

Matrix Spike (1703164-MS1)

Source: 1703124-01

Prepared & Analyzed: 03/18/17

Benzene	27.7	1.0	ug/l	33.3	ND	83.2	34-141			
Toluene	33.5	1.0	"	33.3	ND	100	27-151			
Ethylbenzene	37.2	1.0	"	33.1	ND	113	29-160			
m,p-Xylene	80.5	2.0	"	66.5	ND	121	20-166			
o-Xylene	36.7	1.0	"	32.7	ND	112	33-159			
Surrogate: 1,2-Dichloroethane-d4	13.3		"	13.3		99.8	37-154			
Surrogate: Toluene-d8	13.0		"	13.3		97.6	45-149			
Surrogate: 4-Bromofluorobenzene	13.5		"	13.3		101	45-146			

Summit Scientific

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DCP Operating Company
 370 17th Street #2500
 Denver CO, 80202

Project: Eaton Commons

Project Number: [none]
 Project Manager: Steve Weathers

Reported:
 03/22/17 13:57

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Notes
	Result	Limit			Units	%REC	Limits	RPD	

Batch 1703164 - EPA 5030 Water MS

Matrix Spike Dup (1703164-MSD1)	Source: 1703124-01			Prepared & Analyzed: 03/18/17						
Benzene	27.7	1.0	ug/l	33.3	ND	83.2	34-141	0.0721	32	
Toluene	33.0	1.0	"	33.3	ND	98.9	27-151	1.57	25	
Ethylbenzene	36.9	1.0	"	33.1	ND	112	29-160	0.863	50	
m,p-Xylene	78.9	2.0	"	66.5	ND	119	20-166	1.97	36	
o-Xylene	36.1	1.0	"	32.7	ND	111	33-159	1.54	26	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>14.2</i>		<i>"</i>	<i>13.3</i>		<i>106</i>	<i>37-154</i>			
<i>Surrogate: Toluene-d8</i>	<i>13.1</i>		<i>"</i>	<i>13.3</i>		<i>98.5</i>	<i>45-149</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>13.5</i>		<i>"</i>	<i>13.3</i>		<i>101</i>	<i>45-146</i>			

Summit Scientific

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DCP Operating Company
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Project: Eaton Commons

Project Number: [none]
Project Manager: Steve Weathers

Reported:
03/22/17 13:57

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference